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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,069	12/29/2003	Stavros Photios Basseas	8362/85877 (Parent) (BEL-	7945

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EXAMINER

ENSEY, BRIAN

ART UNIT

PAPER NUMBER

2643

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,069

Applicant(s)

BASSEAS, STAVROS PHOTIOS

Examiner

Brian Ensey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/12/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 19-38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,674,867. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art at the time of the invention that the external programmer to be used with a separate hearing aid of the aforementioned patent is useable as a fitting system for programming a separate hearing aid as claimed in the pending application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30, 31, 33, 37 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer U.S. Patent No. 5,604,812.

Regarding claim 30, Meyer discloses a fitting system for establishing a set of performance defining parameters for a separate, programmable hearing aid comprising: circuitry for downloading parameters to and programming the hearing aid (29); circuitry for presenting pre-stored sound stimuli to the hearing aid for user evaluation of the performance of the hearing aid using the programmed parameters (5,7,9,30); and circuitry for receiving user feedback of the pre-stored sound stimuli and for modifying the current set of parameters forming an updated set of parameters that are downloaded to the hearing aid (23) (See Fig. 3 and col. 5, line 33 to col. 6, line 11).

Regarding claim 31, Meyer further discloses includes circuitry for retrieving the pre-stored sound stimuli to be presented to the user (22).

Regarding claim 33, Meyer further discloses a programmed processor (15) for providing an initial parameter set for the hearing aid.

Regarding claims 37 and 38, Meyer discloses a method of optimizing a set of parameters for a programmable hearing aid comprising: presenting pre-stored audio stimuli to a hearing aid programmed with a set of parameters; receiving feedback responsive to the stimuli from a user of the hearing aid; processing the user feedback and altering the existing set of parameters of the hearing aid in response thereto; transferring the altered set of parameters to the hearing aid; and repeating previous steps; where the processing includes using fuzzy logic methodology (See Fig. 3 and col. 5, line 33 to col. 6, line 11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-29, 32 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer.

Regarding claim 19, Meyer discloses a fitting system for programming a separate hearing aid comprising: a programmable processor coupled to circuitry (29) for transferring parameters from the processor to a programmable hearing aid to specify the performance thereof; the processor for presenting pre-stored audio stimuli to the hearing aid and circuitry for receipt of real-time feedback from a user of the hearing aid, the feedback being related to the presented pre-stored audio stimuli; the processor responsive to the user feedback to modify the parameters of the hearing aid in accordance with that feedback; and downloading the modified parameters to the hearing aid thereby altering the performance thereof (See Fig. 3 and col. 5, line 33 to col. 6, line 11). Meyer does not expressly disclose software programs to perform the functions of presenting pre-stored audio stimuli or downloading the modified parameters to the hearing aid. However, Meyer teaches data and algorithms stored in memory for presenting pre-stored audio stimuli and the use of a personal computer programming unit for the transfer of data to the programmable hearing aid (See Fig. 3). It would have been obvious to one of ordinary skill in the

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art at the time of the invention that this data storage and transfer provide software components for operation of the fitting system.

Regarding claims 20 and 32, Meyer further discloses circuitry for executing the fuzzy logic functions of data (14). Meyer does not expressly disclose the fuzzy logic system includes a software component, however it is inherent in the fuzzy logic module that the rules for operation of the module are software type instructions. It would have been obvious to one of ordinary skill in the art at the time of the invention that software instructions are used to set up and operate a fuzzy logic data processing module.

Regarding claim 21, Meyer further discloses the processor for establishing an initial set of parameters by neural network processing of selected user data using a software executable program (See col. 5, lines 45 to 52).

Regarding claims 22 and 23, Meyer discloses repetitively presenting the audio stimuli and in response to user feedback, repetitively modifying the parameters thereby providing an optimized set of parameters (See Fig. 3 and col. 5, line 33 to col. 6, line 11). However, Meyers does not expressly disclose the functions are executed by software. However, Meyer teaches data and algorithms stored in memory for presenting pre-stored audio stimuli and the use of a personal computer programming unit for the transfer of data to the programmable hearing aid (See Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention that this data storage and transfer provide software components for operation of the fitting system.

Regarding claim 24, Meyer discloses a fitting system for programming a separate hearing aid comprising: circuitry couplable to a hearing aid that is programmable with parameters to specify the performance thereof; circuitry for presenting pre-stored audio stimuli to the hearing

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aid and for receipt of real-time feedback from a user of the hearing aid, the feedback being related to the presented pre-stored audio stimuli; circuitry for implementing fuzzy logic processing for responding to the user feedback to modify at least one parameter of the hearing aid in accordance with that feedback; and downloading the modified at least one parameter to the hearing aid thereby altering the performance thereof (See Fig. 3 and col. 5, line 33 to col. 6, line 11). Meyer does not expressly disclose software programs to perform the functions of presenting pre-stored audio stimuli or downloading the modified parameters to the hearing aid. However, Meyer teaches data and algorithms stored in memory for presenting pre-stored audio stimuli and the use of a personal computer programming unit for the transfer of data to the programmable hearing aid (See Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention that this data storage and transfer provide software components for operation of the fitting system.

Regarding claims 25 and 26, Meyer further discloses the processor for establishing an initial set of parameters by neural network processing of selected user data using a software executable program (See col. 5, lines 45 to 52).

Regarding claim 27, Meyer discloses repetitively presenting the audio stimuli and in response to user feedback, repetitively modifying the parameters thereby providing an optimized set of parameters (See Fig. 3 and col. 5, line 33 to col. 6, line 11). However, Meyer does not expressly disclose the functions are executed by software. However, Meyer teaches data and algorithms stored in memory for presenting pre-stored audio stimuli and the use of a personal computer programming unit for the transfer of data to the programmable hearing aid (See Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention that this data storage and transfer provide software components for operation of the fitting system.

Regarding claim 28, Meyers further discloses circuitry comprises a processor for executing the software (29).

Regarding claim 29, Meyers further discloses circuitry for retrieving the pre-stored audio stimuli (See Fig. 3 and col. 5, line 33 to col. 6, line 11).

Regarding claim 34, Meyer discloses a fitting system for programming a separate hearing aid comprising: presenting pre-stored audio stimuli to a programmable hearing aid and circuitry for receipt of real-time feedback from the hearing aid user relative to the presented pre-stored audio stimuli; circuitry responsive to the user feedback to modify a current set of parameters of the hearing aid; and downloading the modified parameters to the hearing aid thereby altering the characteristics thereof (See Fig. 3 and col. 5, line 33 to col. 6, line 11). Meyer does not expressly disclose software programs to perform the functions of presenting pre-stored audio stimuli or downloading the modified parameters to the hearing aid. However, Meyer teaches data and algorithms stored in memory for presenting pre-stored audio stimuli and the use of a personal computer programming unit for the transfer of data to the programmable hearing aid (See Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention that this data storage and transfer provide software components for operation of the fitting system.

Regarding claim 35, Meyer further teaches the circuitry implements fuzzy logic processing (See col. 5, line 63 to col. 6, line 6).

Regarding claim 36, Meyer further teaches additional circuitry to repetitively modify the parameters (See col. 5, line 53 to col. 6, line 6).

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 703-305-7363. The examiner can normally be reached on Mon-Fri: 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9306, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to: Customer Service Window, Randolph Building, 401 Dulany Street, Arlington, VA 22314

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BKE
February 28, 2005


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